

# COVID-19 AND INDIAN AUTOMOBILE INDUSTRY- A JOURNEY THROUGH DARK TUNNEL

**DR. SHRABANTI PAL**

*Assistant Professor, Department of Commerce, Fakir Chand College, West Bengal*

## ABSTRACT

*Indian automobile industry, considered as one of the engines of growth is going through a very crucial condition and facing financial headwinds even before the pandemic situation and COVID-19 is only accelerating many of these concerns. COVID-19 pandemic accentuates the deceleration by causing severe demand and supply disruptions. The present paper is an endeavor to present the current state of the Indian automobile sector through certain key factors like productions, domestic sales, export and employee benefit cost. Graphical presentation is used to analyze the key factors which revealed that production, domestic sales and export of passenger and commercial vehicles are on a declining trend, whereas, two and three wheeler are showing fluctuating trend during the study period. Indian auto sector is also facing the challenges that arise out of such an exceptional pandemic situation and going through end-to end transformation like digitalization of showroom visits, etc. It is expected that the industry will gradually step up in near future and secure a stable position.*

**KEYWORDS:** COVID-19, Pandemic, Indian Automobile Industry, Performance of Automobile Sector & Impact of COVID-19

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## INTRODUCTION

Automobile is one of the core sectors of the Indian economy and, to a great extent serves as bellwether for its current state. The automotive market of India is divided into four main segments like passenger vehicles (PV), commercial vehicles (CV), three wheelers (3W) and two wheelers (2W). The domestic Indian automobile market is predominantly dominated by 2W and PV and accounts for 81% and 13% of total sales units. Rising income and greater availability of credit and financing options have been key growth drivers for this sector. As of 2019, India is the fourth largest automobile market in the world, surpassing Germany in terms of sales and expected to beat the Japanese auto market in FY 2021. But a lot has changed after the outbreak of the COVID pandemic all around the world. The sector has started facing problems at the beginning of FY 2020 owing to the turmoil of certain domestic economic factors including the NBFC crisis, lack of consumers' spending, more private investments, poor monsoon season and imposition of BS-VI norms. Meanwhile, the outburst of COVID-19 resulted in prolonged unplanned lockdown which hit the soft spot and led to a plunge in manufacturing and selling statics further. In the backdrop of COVID, Indian automobile sector suffers worst. The present paper is an endeavor to assess and determine the actual scenario of the performance of this industry in terms of four key factors like production, domestic sales, exports and employees benefit costs.

## LITERATURE REVIEW

The outbreak of COVID-19 will affect the manufacturing sector every now and then and the intensity of such impact may range from short term to long term. Demand and supply chain are severely affected and crushed down international trade and commerce. There is also possibility of damages to the entire system of international trade and commerce (Richard Baldwin, et.al, 2020). Due to the outbreak of the COVID pandemic, public health systems all over the world accompanied with economic downfall may significantly affect the stock market (Scott R. Baker.et.al, 2020). Indian auto sector is one of the worst sufferers of manufacturing industries. Indian automobile industry has faced many challenges because of slowdown in the economy during 2018-19, but the pandemic seems to be the last nail in the coffin. It's not only hurt the demand but also affect the supply chain severely. However, due to good harvest season, festival moods stimulated the demand and help to overcome such pandemic challenges. To increase resilience, automakers should undertake a thorough review of their product portfolios to make them more customers centric (Chibber and Gupta, 2021). According to a parliamentary panel report in the wake of COVID-19 and subsequent lockdown resultant into 2300 crore loss per day and an estimated job loss in the sector was about 3.45 lakh. Considering the crisis it is predicted that the Indian automobile industry is likely to go through atleast two consecutive years of rigorous contraction, leading to low level of capacity utilization, lack of future CAPEX investment, high risk of bankruptcy and job losses across the entire automotive value chain (Financial Express, 2020). With so many uncertainties, it is difficult to predict the future of this sector. However, the growing preference for personal mobility and the gradual opening of economic activities accelerate some momentum in the recovery of the industry (Business Standard, 2021).

## OBJECTIVES

The primary objective of the study is to determine the performance of the Indian automobile industry in the backdrop of the COVID-19 pandemic.

## METHODOLOGY

### Sample Selection

The present study is empirical in nature and purely based on secondary data. For the purpose of the present study total of four key factors like production, domestic sales, export and employee benefit costs of automobile companies are adopted. The data for production, domestic sales and export of passenger vehicles, commercial vehicles, three wheelers and two wheelers are collected from SIAM. Employee benefit cost data are collected from different listed (BSE or NSE or both) automobile companies' annual reports for a period of 6 years from 2015-16 to 2020-21.

### Research Methodology

To perform the analysis of the effect of COVID-19 on the automobile sector the following tools are used in the present study:

- Tabular presentations of key factors are shown to facilitate the data analysis.
- Graphical presentation like column charts and line charts are used in the study.
  - Column chart is used to compare the values of key factors visually. It also helps in displaying the comparison among the key factors on an overall chart over a period of time.

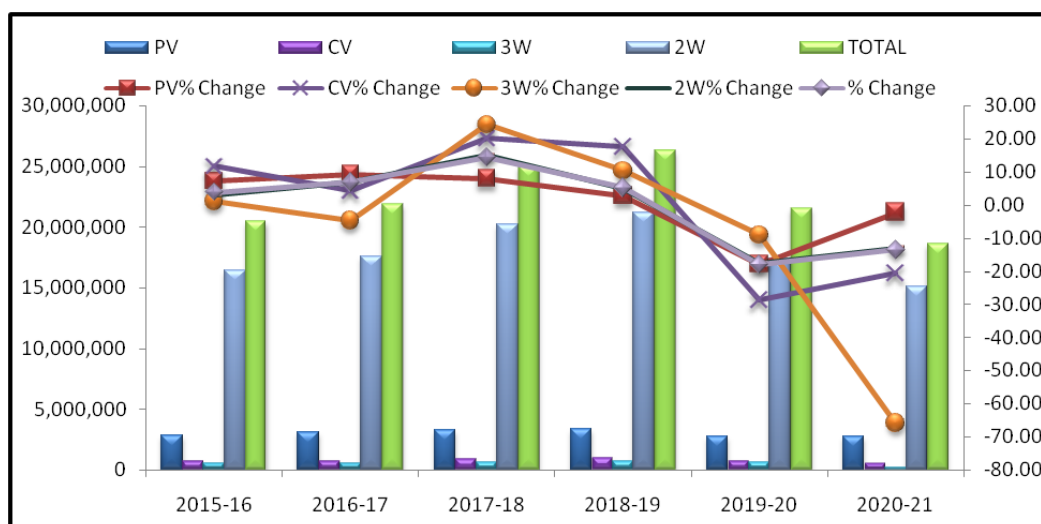
- Line chart is basically applied to represent the trend of a variable over a continuous time span. This chart is used in the present study to observe the growth pattern of the key factors during the study period.

## ANALYSIS OF DATA

**Table 1: Domestic Sales, Growth of Domestic Sales and CAGR of Domestic Sales of Automobile Sector**

Year/ Category of Vehicles		2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	CAGR
Passenger Vehicle (PV)	Units	2789208	3047582	3288581	3377389	2773575	2711325	-0.47
	Growth (%)	7.23	9.26	7.91	2.70	-17.88	-2.24	
Commercial Vehicle (CV)	Units	685704	714082	856916	1007311	717688	569000	-3.06
	Growth (%)	11.51	4.14	20.00	17.55	-28.75	-20.72	
Three Wheeler (3W)	Units	538208	511879	635698	701005	636569	216000	-14.12
	Growth (%)	1.048	-4.892	24.189	10.273	-9.192	-65.933	
Two Wheeler (2W)	Units	16455851	17589738	20200117	21179847	17417616	15119000	-1.40
	Growth (%)	3.01	6.89	14.84	4.85	-17.76	-13.20	
Total	Units	20468971	21863281	24981312	26265552	21545448	18615325	-1.57
	Growth (%)	3.78	6.81	14.26	5.14	-17.97	-13.60	

Source: SIAM 2021 and Author's Calculation



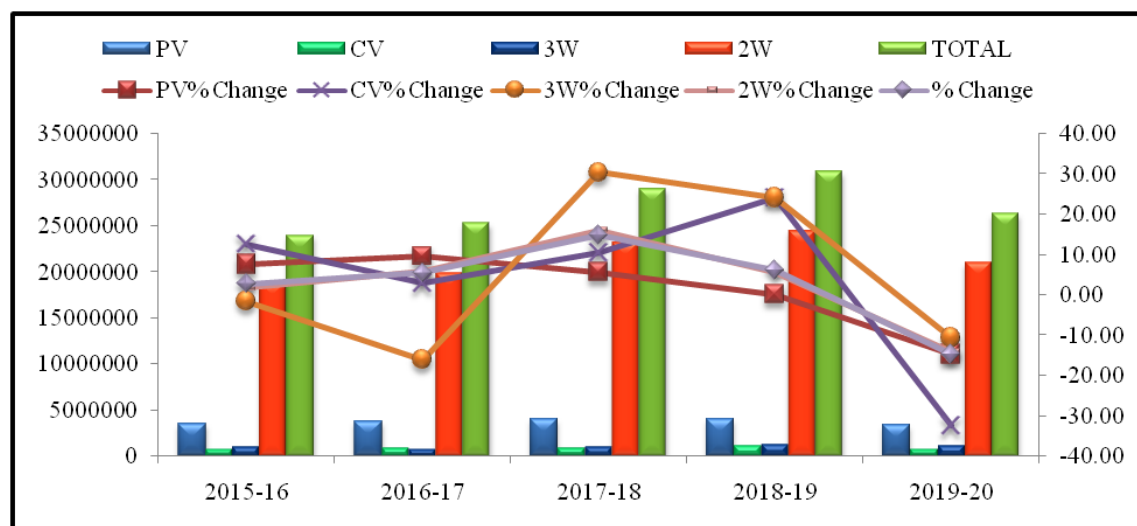
**Figure 1: Domestic Sales, Growth of Domestic Sales of Automobile Sector.**

The above table and chart are showing the domestic sales of the automobile sector from 2015-16 to 2020-21. Domestic sales of PV have started to decline since FY 2018-19 registering a growth of 2.70 compared to 7.91 in previous FY 2017-18. But it has registered de-growth of (-) 17.88 and (-) 2.24 in FY 20 and FY 21 respectively. The same trend has been shown in the case of CV also. The domestic sales of CV have turned down to 717688 units in 2019-20 to 569000 units in 2020-21. The pace of growth rate of sales of CV has shown the value of (-) 28.75 and (-) 20.70 in FY 2019-20 and 2020-2021 respectively. On the other hand, sales of 3W are severely affected due to pandemic conditions and hit rock bottom of 216000 units and registering de-growth of (-) 65.933% in FY 2020-21 compared to 636569 units and (-) 9.912 in

2019-20. The velocity of domestic sales of 2W has recorded a sharp decline to 15119000 units in 2020-21 from 21179847 units in 2018-19. The growth rate of domestic sales of 2W has been shown (-) 17.76 and (-) 13.20 in 2019-20 and 2020-21 respectively. Domestic sales of automobiles are surely affected due to pandemic attack which results in prolonged lockdown, restricted mobility of customers to car showrooms, deterioration in the world economy, uncertainty in income etc. CAGR of total domestic sales for the study period is (-) 1.57 which is quite depressing for the automobile manufacturers.

<b>Table 2: Production, Growth of Production and CAGR of Production of Automobile Sector</b>							
<b>Year</b>		<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>CAGR</b>
<b>Passenger Vehicle (PV)</b>	Units	3465045	3801670	4020267	4028471	3434013	-0.18
	Growth (%)	7.56	9.71	5.75	0.20	-14.76	
<b>Commercial Vehicle (CV)</b>	Units	786692	810253	895448	1112405	752022	-0.90
	Growth (%)	12.66	2.99	10.51	24.23	-32.40	
<b>Three Wheeler (3W)</b>	Units	934104	783721	1022181	1268833	1133858	3.95
	Growth (%)	-1.57	-16.10	30.43	24.13	-10.64	
<b>Two Wheeler (2W)</b>	Units	18830227	19933739	23154838	24499777	21036294	2.24
	Growth (%)	1.84	5.86	16.16	5.81	-14.14	
<b>TOTAL</b>	Units	24016068	25329383	29092734	30909486	26356187	1.88
	Growth (%)	2.82	5.47	14.86	6.24	-14.73	

Source: SIAM 2021 and Author's Calculation



**Figure 2: Production, Growth of Production of Automobile Sector.**

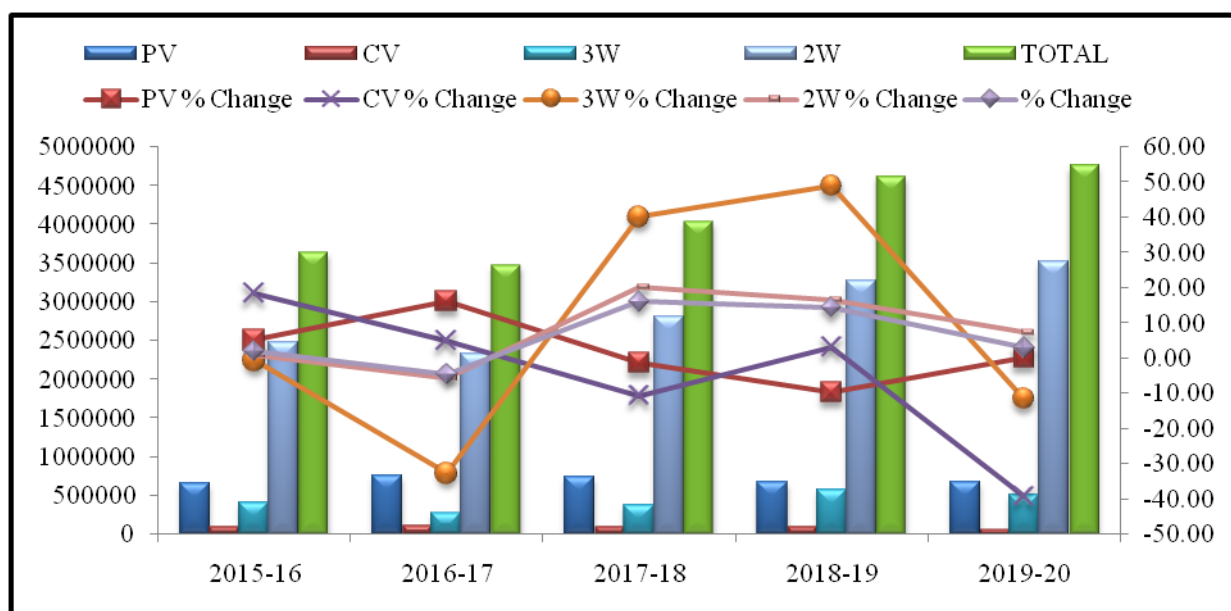
The above graph is showing the production in units and growth rate of the production during the study period. The attack of COVID-19 has severely affected the production of different variant of vehicles since third quarter of 2019. The production of PV has registered de-growth of (-) 14.76 in 2019-20. A sharp reduction is found in production of PV from 4020267 units in 2018-19 to 3434013 units in 2019-20. The growth rate of production of CV was quite impressive till 2018-19. The total production of CV came down to 752022 in FY 2019-20 compared to 1112405 units in 2018-19, recording a negative growth of (-)32.40. The production of 3W is portraying a fluctuating trend during the study period registering de-growth of (-) 1.57 in FY 2015-16, (-) 16.10 in FY 2017-18 and (-) 10.64 in FY 2019-20. So it is very difficult to say that pandemic has affected the production of 3W during this period. The production of 2W has reached to highest number of production in FY 2017-18 with a figure of 23154838 units registering growth rate of 16.16%. But it has

been reduced stridently in FY 2019-20 and reached to 21036294 units with a negative growth of (-) 14.14%. Hence, it could be said that the production of the auto sector has been immensely affected by the pandemic situation resulting into unplanned lockdown, restricted mobility of workers from one place to another, implementation of BS-VI by the Indian government, unprecedented fall in worldwide economy etc. CAGR of production for the study period for PV, CV, 3W and 2W are (-) 0.18, (-) 0.90 3.95 and 2.24 respectively. The total production of auto sector has registered positive CAGR of 1.88.

**Table 3: Export, Growth of Export and CAGR of Export of Automobile Sector**

Year		2015-16	2016-17	2017-18	2018-19	2019-20	CAGR
Passenger Vehicle (PV)	Units	653053	758727	748366	676192	677311	0.73
	Growth (%)	5.10	16.18	-1.37	-9.64	0.17	
Commercial Vehicle (CV)	Units	103124	108273	96865	99933	60713	-10.05
	Growth (%)	18.62	4.99	-10.54	3.17	-39.25	
Three Wheeler (3W)	Units	404441	271894	381002	567683	502169	4.42
	Growth (%)	-0.78	-32.77	40.13	49.00	-11.54	
Two Wheeler (2W)	Units	2482876	2340277	2815003	3280841	3520376	7.23
	Growth (%)	1.03	-5.74	20.29	16.55	7.30	
<b>TOTAL</b>	Units	3643494	3479171	4041236	4624649	4760569	5.49
	Growth (%)	1.96	-4.51	16.16	14.44	2.94	

Source: SIAM 2021 and Author's Calculation



**Figure 3: Export, Growth of Export of Automobile Sector.**

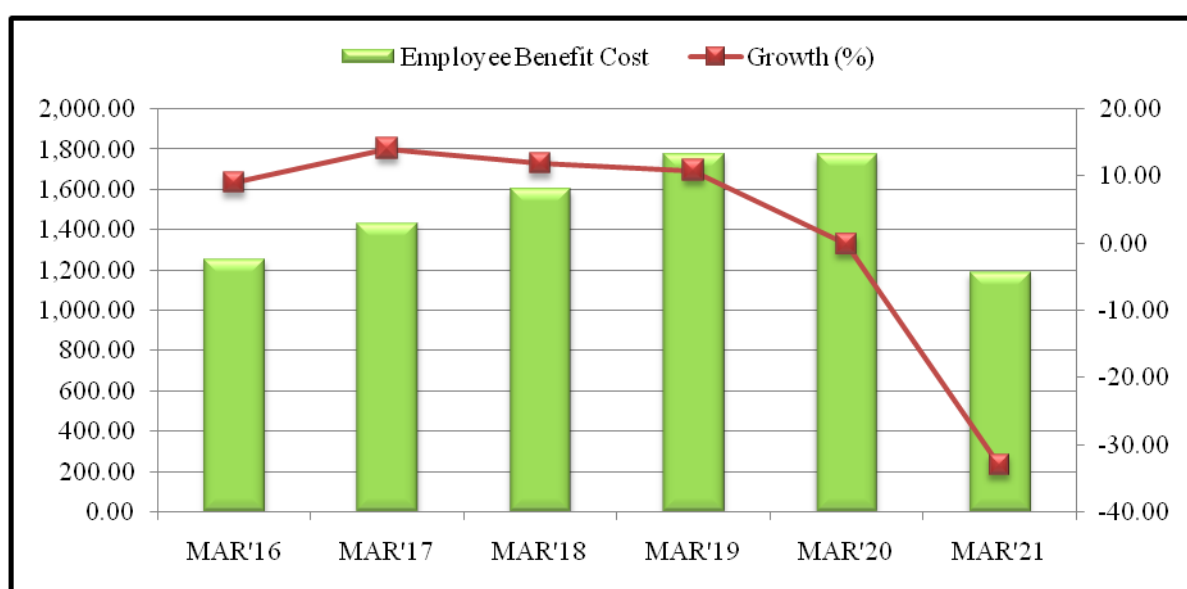
The above chart is showing the export of all variants during the study period. The export of PV has shown a downturn since 2017 to 2019 and marginally improves in 2020 with a growth of 0.17. On the other hand, export of CV has amplified from 103124 to 108273 in 20015-16. But severely declined in 2017-18 and registered de-growth of (-) 10.54. Eventually, the export improved during 2018-19 with a positive growth rate of 3.17. However, the worldwide pandemic situation affects international business to a great extent and it has recorded negative growth of (-) 39.25. The export of 3W has depicted a fluctuating trend during the study period. It has registered a negative growth rate of (-) 0.78 and (-) 32.77 respectively in FY 2015-16 and 2016-17. The pandemic attack has an immense impact on the export of 3W which shows a

reduction in the growth rate of (-) 11.54 in 2019-20. On the other hand, export of 2W has shown an increasing trend till 2018-19 but decreased sharply in 2019-20. CAGR of export for all variants of vehicles has recorded positive figures except CV. CAGR of CV for the study period showed a value of (-) 10.05.

**Table 4: Employee Benefit Cost and Growth of Employee Benefit Cost**

Time	Employee Benefit Cost	Growth (%)
2015-16	1,256.14	9.04
2016-17	1432.785	14.06
2017-18	1603.696	11.93
2018-19	1777.962	10.87
2019-20	1775.952	-0.11
2020-21	1188.251	-33.09

Source: Author's Calculation



**Figure 4: Employee Benefit Cost and Growth of Employee Benefit Cost.**

The above graphical presentation is showing the employee benefit costs and its growth during the study period. The amount of cost is on increasing trend till 2018-19. But the amount has been started to decline since 2019-2020 due to the outbreak of COVID-19 in December 2019 which resulted in prolonged lockdown and restriction on mobility of workers. However, the growth rate of such cost is on decreasing trend during the study period and in FY 2019-2020 and 2020-21 it becomes negative. The employee benefit cost has recorded de-growth of (-) 0.11 and (-) 33.09 in FY 2019-20 and 2020-21 respectively during the last two years of study because of pandemic situation.

## CONCLUSIONS

The Indian auto sector is severely affected by the devastating COVID pandemic. COVID-19 is one of the major reasons for disruption and economic hardship around the globe and the Indian automobile sector is also felt the pinch of it. A deep structural slowdown in the industry even before the pandemic combined with the impact of the pandemic has pushed all the segments of vehicles back by many years. Apart from an unprecedented slowdown, the resilience of the industry was tested severely when the nationwide lockdown was announced towards March end in 2020. The gloomy clouds of COVID resultant into prolonged unplanned lockdown have forced any major Indian car manufacturers to pause their production. In

the meantime, some of the auto makers have delayed or even cancelled their production plans which are otherwise set for the first quarter of FY 2021. The industry started to heal up after the first wave of the pandemic was over but the second wave has crushed down the economic planning of this sector. The range of impact of COVID may be short to long term. It ranges from a shortage of raw materials, shifting of production from one country to another, liquidity crunch, deferred launches of new models and shrinkage in consumer's demand which can make the current condition of the industry more worsen. But at the end of the dark tunnel there is always a ray of hope. Some major Indian automobile makers have started their production in the second quarter in FY 2021. To gain the momentum the sector has driven into end to end transformation and takes certain measures like prioritising employees and workers protection, speed up business setup instant response and review team to ensure business continuity plan and prepare proper working environment guidelines in the critical situation. In the backdrop of COVID-19, the sector has led to speedy adoption of digitization and contact less vehicle buying experience. Even automobile producers are also keen to implement omnichannel retail at the large level. This approach will let consumers have a wonderful experience of a combined online and brick-and-mortar environment. It is expected that the sector will resurgence in the near future once the pandemic is over and under the control attributed to rising demand, good monsoon, reduction in car loan interest, the introduction of several financing options, and government packages.

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